

1. The Regulations also require a narrative of the proposed Significant Change and its associated costs both to the Holder, as well as to the Holder's Patient Panel. While you state there will be no impact on costs, to operate an additional day will require additional staffing and operating costs.
 - a. Please explain these additional operating costs.
 - i. **Electricity, Gas, Mgmt Expense, Service Related (Contrast, Drugs, Supplies, etc.), Staffing (Techs/Front Office), Physician Related**
Provide the dollar amounts:
 - **Adding an extra operational day will lead to increased costs, most notably an estimated \$40,000 annually for additional staffing (Technicians and Front Office personnel) and an estimated \$12,000 annually for service-related items such as contrast media, drugs, and other supplies. These expenses are directly related to an anticipated increase in patient volume and are essential for maintaining our high standards of patient-to-staff ratios, safety, and efficient patient flow. It's important to note that these increased operating costs will be managed internally and will not be passed on to individual patients. We expect only marginal increases in electricity, gas, management, and physician-related costs, as our facility is already efficient.. The primary benefit of this expansion is improved patient access and potentially shorter wait times, enhancing the overall patient experience.**
 - b. You state that without this additional day, patients would need to travel farther and wait longer. Where and how far away are the next three closest MRI units? Is there availability at those units? What are the patient panel costs associated with travel to another site?
 - i. **Shields Heywood MRI at Heywood Hospital in Gardner provides vital diagnostic imaging services for North Central Massachusetts, a region with limited local alternatives. Adding an extra day of service will directly improve patient access, reduce wait-times, and alleviate travel burdens for residents needing crucial MRI scans. The closest facilities listed below also face capacity constraints that can also be addressed with the additional day of service by eliminating patients traveling to these facilities and staying closer to home. Patients face substantial costs by traveling to alternative MRI facilities, encompassing both direct financial expenses for fuel, tolls, and parking (or costly medical transport), and significant logistical burdens like lost income and time away from work or family care. Improved local access promotes health equity by ensuring that all residents, regardless of their proximity to major urban hubs, can receive timely and necessary diagnostic care.**
 1. **Shields/UMass Leominster (Leominster, MA) – 14.4 miles**
 2. **Shields/UMass Marlborough (Marlborough, MA) – 35.8 miles**
 3. **Shields/UMass Shrewsbury Street (Worcester, MA) – 37.3 miles**
 - c. What is your current payer mix? How does that compare to what was projected in the approved Application? Please respond
 - i. **Payor Mix was not projected out in the approved Application. Historical payor data was based on the former vendor and does not align with current data supplied in question 1(e).**

- d. Is the chart below the current FY's payor mix? If not what is the year of the Payor mix in the chart below, and is it the same for this FY? For comparison, please add a column to the chart comparing the current FY to the year provided in the application.
- i. Below the chart states that it is representative of FY 2024 payor mix. This has been added to the chart below for clarification. Provided is a projected 2028 payor mix based on a population that is expected to continue to age, driving increased growth in Medicare FFS & Medicare Advantage plans as they shift away from Commercial products.
- e. With approval of this Amendment, what is your projected payor mix?

Insurance Type	Payer Mix % 2024	2028
Medicare FFS	20%	21%
Commercial Medicare (Private Medicare/Medicare Advantage)	16%	18%
Commercial (PPO/Indemnity and HMO/POS)	32%	30%
Managed Medicaid (Private Medicaid/Medicaid MCOs)	11%	11%
Other	11%	9%
MassHealth	10%	11%
Total	100%	100%

- i. Payer Mix is expected to remain consistent with the FY 2024 payor mix with the additional day. The addition will contribute to alleviating access issues for the current patient population and is not expected to shift the payor mix significantly.
2. To better understand operating capacity, please provide the following information:

- a. Annual days of operation

- i. 145.5 Operating days in FY 2024 based on operational hours of location. Location scanned on 306 days of the calendar year in FY 2024. Please clarify the two different numbers?

1. 145.5 days is the total operational time the location was open based on first patient to last patient in terms of open minutes at the facility. If we look at the number of calendar days patients were scanned, this represents 306 days in the year.

- b. Daily Hours of operation

Day	Daily Operational Hours
Mon	12.0
Tue	12.6
Wed	12.4
Thu	12.2
Fri	13.0
Sat	7.8

- i.
- c. Minutes per scan including turnaround time
- i. 26.5 Min/Scan (Based on Total Booked Min/Scans) for FY 2024

d. Based on this what is your daily and annual capacity?

i. Capacity

Day	Daily Capacity
Mon	25
Tue	26
Wed	26
Thu	27
Fri	28
Sat	20
Annual	7,902

ii.

3. In order to understand the Amendment request please provide the following in one chart by year.

a. Historical average daily MRI volume per day for the past three years by specialty.

Average Daily MRI Volume by Specialty			
Specialty	2023	2024	YTD June 2025
Abdomen	2	2	2
Arthrogram	0	0	0
Brain	6	6	7
Cervical	2	2	2
Chest	0	0	0
Head/Neck	1	0	0
Lower Extremity	3	3	3
Lumbar	4	4	4
Pelvis	0	0	0
Thoracic Spine	1	1	1
Upper Extremity	2	2	3
Total	21	22	23

b.

c. How does this historical volume compare to your projections in the approved Application?
(calculate variance)

i. **Overall – Average scans/day are expected to remain relatively close to the same with the additional day of service. This additional day will help increase access via more operational hours and volumes and case mix are expected to remain consistent with current trends.**

Heywood MRI Daily Average Projected Volumes (2025-2028)						
Specialty	2023	2024	2025 FC	2026 FC	2027 FC	2028 FC
Abdomen	2	2	2	2	2	3
Arthrogram	0	0	0	0	0	0
Brain	6	6	6	6	7	7
Cervical	2	2	2	2	3	3
Chest	0	0	0	0	0	0
Head/Neck	1	0	0	0	0	0
Lower Extremity	3	3	3	3	4	4
Lumbar	4	4	4	4	4	5
Pelvis	0	0	0	0	1	1
Thoracic Spine	1	1	1	1	1	1
Upper Extremity	2	2	2	2	2	2
Total	21	22	21	22	24	26

d. Projected scan volume from 2025-2028 by specialty.

Heywood MRI Projected Volumes (2025-2028)				
Specialty	2025	2026	2027	2028
Abdomen	730	788	852	920
Arthrogram	47	50	54	59
Brain	2,104	2,272	2,454	2,650
Cervical	781	843	911	984
Chest	1	1	1	1
Head/Neck	139	150	162	175
Lower Extremity	1,131	1,221	1,319	1,425
Lumbar	1,320	1,426	1,540	1,663
Pelvis	162	175	190	205
Thoracic Spine	240	260	280	303
Upper Extremity	687	742	801	865
Total	7,342	7,929	8,564	9,249

i.

4. Explain with data, to what do you attribute the increased need by your patient panel for this increase in scan volume.

a. The increased need in additional MRI capacity can be attributed to the applicant's growth in scan volume YoY and the resulting average wait time for a scan. From 2023 to 2024, the applicant saw a 49% increase in volume, with 4,515 scans performed in 2023, and 6,767 scans performed in 2024. Additionally, the applicant saw an increase of 63.3% for the number of unique patients who received an MRI, with 1,235 unique patients in 2023, and 2,198 in 2024. This significant growth in volume and unique patients demonstrates an increased need for MRI capacity, which has resulted in an average wait time per patient of 11.2 days for scans with contrast and 6.5 days for scans without contrast until the next available appointment.

5. What factors demonstrate that the increasing scan volume reflects increasing need for MRI amongst the Holder's patient panel and SAP, and not new demand due to available capacity?

- a. What measures are in place to ensure that MRI scans are clinically appropriate?
Medicare, MassHealth and commercial carriers all require medical necessity criteria be met in advance of completing most MRI scans through rigorous prior authorization requirements. Medical necessity must meet the burden of appropriateness, and expectations of improvement, safety, and efficiency. Additionally, each exam is evaluated by exam type cross referencing to diagnosis along with Radiologist oversight and approval to meet medical necessity.
 - b. What Measures are in place to reduce unnecessary utilization of MRI scans?
 - i. **Medicare, MassHealth and commercial carriers all require medical necessity criteria be met in advance of completing most MRI scans through rigorous prior authorization requirements. Medical necessity must meet the burden of appropriateness, and expectations of improvement, safety, and efficiency. Additionally, Radiologist oversight for approval to meet medical necessity.**
6. The application states that the current wait time is 11 days from referral to the date of the scan.
- a. Explain what measures have been taken to alleviate that wait.
 - a. **Daily monitoring of patient cancels and backfilling with cases waiting to be performed or booked out. Flexing hours of operation during approved days of operation albeit based on staff availability.**
 - b. What the optimal wait time to receive a MRI scan is? Provide any industry standard/ national benchmarks for optimal wait times for MRI scans.
 - a. **According to a study performed by the American College of Radiology, the benchmark for MRI wait times is 18.5 days from the time a patient's scan is ordered to when the scan is performed. Based on historical data at this location, the applicant's average wait time from when a patient's scan is ordered to when the scan is performed is also 18.5 days. Taking into consideration the increase in volume and number of unique patients the applicant has experienced year-over-year, adding an additional day of service would ensure patients can receive care in a timely manner at this location.**
Study Link
Explain the difference in the data points of 11.2 days (listed in #4) and 18.5 days here.
 - **11.2 for contrast and 6.5 days represented the average time in days for the first available appointment for that type of scan. The 18.5 days is the average time of order received from the referring provider to the patient being scanned. This is attributed to several factors including patient preference of time of day for scan, incomplete orders, prior authorization needs, & patient implant/safety verification.****The implementation of an additional day of service is also critical for inpatient/ED care by providing faster access to vital diagnostic and treatment services. This improved throughput will prevent Hospital admissions and increased lengths of stay for inpatients, optimizing bed capacity and ensuring beds are available for new admissions. This additional capacity also ensures the facility can maintain the necessary access by avoiding a 100% operational capacity to readily accommodate urgent inpatient cases without compromising timely care.**

- c. By how much does the Holder expect wait times to decrease as a result of the Proposed Project.
 - a. **The proposed project directly addresses current patient access challenges, where an average 18.5-day wait from order to scan contributes to a growing backlog. By implementing 7-day/week operations, we will increase our weekly service capacity, enabling us to prevent further backlog accumulation and begin systematic reduction of the existing queue. This enhanced capacity is conservatively projected to decrease average wait times by 1-2 days initially, leading to more efficient backlog management and significantly improving timely access to diagnostics for our patients.**
- d. Provide any data or evidence demonstrating improved health outcomes resulting from reducing wait time from the existing wait time to the Holder's expected wait time after project implementation.
 - a. **Long wait times aren't just an inconvenience; they play a significant toll on a patient's daily life and overall well-being and directly impact patient satisfaction scores. When care is delayed, individuals are often left to deal with chronic pain and endure prolonged periods of mental stress as they await critical diagnoses and treatment. This delay doesn't just prolong suffering; it can lead to more intense and costly care down the line, turning what could have been manageable issues into more significant health challenges. For instance, expedited diagnostic results can lead to earlier cancer detection and treatment, significantly improving prognosis. The implementation of an additional day of service is also critical for inpatient care by providing faster access to vital diagnostic and treatment services. This improved throughput will prevent increased lengths of stay for inpatients, optimizing bed capacity and ensuring beds are available for new admissions. This additional capacity also ensures the facility can maintain the necessary access by avoiding a 100% operational capacity to readily accommodate urgent inpatient cases without compromising timely care.**